Application/Control Number: 09/815,360 Page 2

Art Unit: 3684

## DETAILED ACTION

 This Office Action is in response to the Amendment filed on April 1, 2010, which paper has been placed of record in the file.

2. Claims 1-25 are pending in this application.

## Allowable Subject Matter/Reasons for Allowance

3. Claim 1 is allowed over the prior arts cited records.

The closest prior art is:

Gatto (US 7,167,838) discloses system for merging and analyzing security analysts' estimates for earnings. The goal is to derive more robust models for estimating a company's future earnings based on multiple analysts' estimates. Gatto mentions trends in his patent, but only qualitatively and peripherally. The use of trends is more in relationship to trends in one or more analysts' predictions. There is no rigorous procedure to quantitatively parameterize a trend, much less deal with piecewise discontinuous trends. Gatto does not quantitatively use trends of time series in his analysis. Analysts' historical performance is accounted for by the use of statistical measures, but there is nothing in Gatto that suggests calculating trends or using them in his method. In contrast, the current application refers to trend analysis. The method is applied to a single series numbers that have been constantly sampled in time or space to determine when trends end. It is not limited to a time series of stock market data. For example, a method of the current invention can be applied to finding geologic sequences from well logs, because those sequences have sharp geologic boundaries.

Application/Control Number: 09/815.360

Art Unit: 3684

The sequences can be approximated with trend lines that have a start and end. Gatto discusses backtesting a model using the historical database and viewing the results of the backtest (Column #8, Lines 55-60), He describes viewing historical estimates and data in a graphical format. The models he describes for backtesting are statistical models combining one or more security analyst(s)' estimates for a company's earnings. His software does not use security prices or constantly sampled time series except to visually compare to one or more analysts' earnings estimates. Moreover, Gatto describes using a "History module" to display the analysts' estimates over a given time period in the past (Column #11, Lines 10-50). This can also be displayed as a grid of text information. The software that he describes can also show historical price stock information with the analyst(s)' estimates and revisions. The user of the software can also use the system to display a model with the analyst(s)' estimates. Thus, Gatto does not disclose a time series for trend analysis.

Gatto also describes charting one or more analyst(s)' estimates for earnings are displayed along with the actual earnings of the stock. The results of a model that combines one or more analyst(s)' earnings estimates can also be displayed. Gatto then goes on to describe in detail how a user of his software can pick one or more security analyst(s)' earnings estimates and the manner in which they are displayed. The user can also calculate simple univariate statistical measures from multiple analyst(s)' estimates, such as the high, low, "mean plus a standard deviation, a mean minus a standard deviation, and other calculated estimates". He describes the graphical display of the analyst(s)' earnings as a time series and how those might be displayed. He

Application/Control Number: 09/815,360

Art Unit: 3684

continues to describe how each earning's estimate would be displayed using a different color with a legend and how a discontinued estimate would be displayed. He also describes how the analyst(s)' estimates would be displayed with a model result.

Therefore, Gatto does not disclose trend analysis or picking the parameters for determining trends.

Gatto is describing clusters, how they are displayed, and how clusters could be formed from a combination of dates, analysts, cluster mean, and cluster standard deviation (Column 12, lines 50-65). He does mention the word "trends" in this section, but it is only in reference to qualitatively identifying trends from the displayed information. Therefore, Gatto does not disclose "selecting a useful group of sets of trend determination parameters for the time series from the plurality of sets of trend determination parameters, such that the useful group of sets includes at least one member" and "processing the time series with each member of the useful group of sets of trend determination parameters to generate a set of trends and trend attributes for each member."

Therefore, it is clear from the description of Gatto, that the prior art does not considered the possibility of: <u>selecting a plurality of sets of trend determination</u> parameters for the time series, each set of trend determination parameters comprising at least one window size, such that the window size defines a number of adjacent data <u>elements from the time series to be used to generate trends; selecting a useful group of sets of trend determination parameters for the time series from the plurality of sets of trend determination parameters, such that the useful group of sets includes at least one</u>

Page 5

Application/Control Number: 09/815,360

Art Unit: 3684

member; processing the time series with each member of the useful group of sets of

trend determination parameters to generate a set of trends and trend attributes for each

 $\underline{\textit{member}; evaluating the trend attributes for each \textit{member}; selecting at least one \textit{set of}}$ 

trends, as included in claim 1.

4. Claims (2-25) are allowed because they are dependent claims of the allowable

independent claim 1 above.

Conclusion

Claims 1-25 are allowed.

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to examiner Nga B. Nguyen whose telephone number is

(571) 272-6796. The examiner can normally be reached on Monday-Friday from

9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kambiz Abdi can be reached on (571) 272-6702.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone number is

(571) 272-3600.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria VA, 22131-1450

Page 6

Application/Control Number: 09/815,360

Art Unit: 3684

Or faxed to:

(571) 273-8300 (for formal communication intended for entry),

or

(571) 273-6796 (for informal or draft communication, please label

"PROPOSED" or "DRAFT").

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nga B. Nguyen/

Primary Examiner, Art Unit 3684

June 1, 2010